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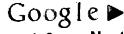
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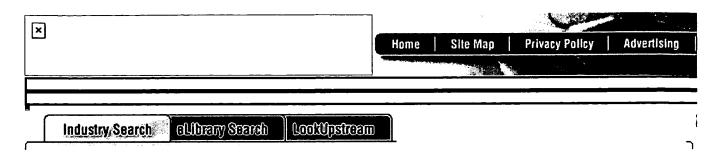
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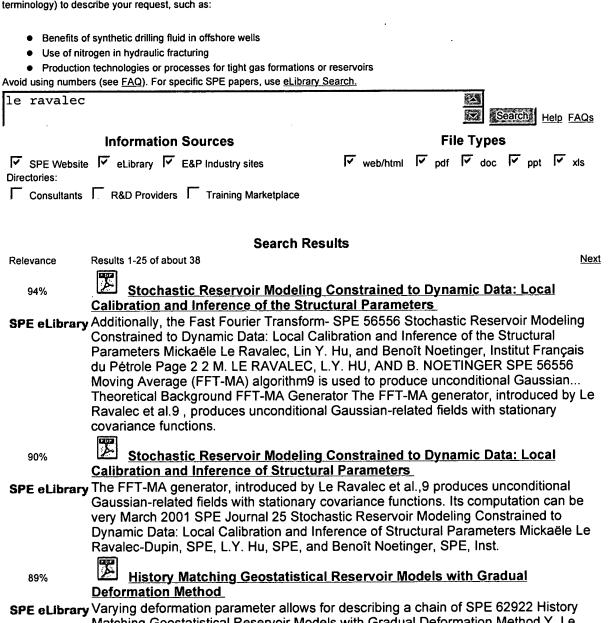
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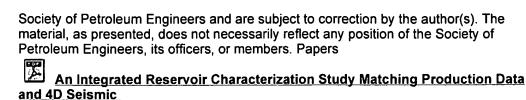
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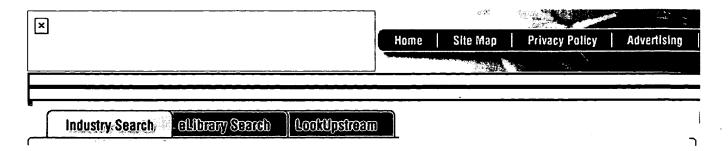
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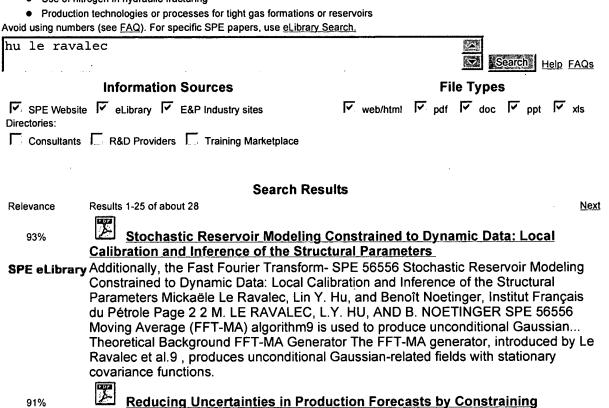
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Reconciling Prior Geologic Information With Production Data Using Streamlines: Application to a Giant Middle-Eastern Oil Field

SPE eLibrary Page 1 SPE 95940 Reconciling Prior Geologic Information With Production Data Using Streamlines: Application to a Giant Middle-Eastern Oil Field D. Fenwick and M. Thiele, Streamsim Technologies Inc., M. Agil, A. Hussain, and F. Humam, Saudi Aramco; and J. Caers, Stanford U. Copyright 2005, Society of Petroleum Engineers This paper was prepared for presentation at the 2005 SPE Annual Technical Conference and Exhibition held in Dallas, Texas, U.S.A., 9 12 October 2005. This paper was selected for presentation by an SPE Program Committee following review of information contained in a proposal submitted by the author(s). Contents of the paper.

Constraining Reservoir Facies Models to Dynamic Data - Impact of Spatial 84% **Distribution Uncertainty on Production Forecasts** 

SPE eLibrary To remove this difficulty, L.Y. Hu [12] suggest to apply the gradual deformation method not on the facies model, but on the related gaussian white noise which is involved in the simulation process (figure 1).

In Search of an Optimal Parameterization: An Innovative Approach to Reservoir Data Integration

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> History Matching Using a Streamline-Based Approach and Gradual Deformation

SPE eLibrary Page 1 History Matching Using a Streamline-Based Approach and Gradual Deformation Y. Gautier, B. Noetinger, and F. Roggero, Inst. Français du Pétrole Summary Reservoir engineers often have to deal with history-matching problems. This is time-consuming because of the many numerical simulations that have to be run and also because of the size of the models. Optimization, coupled with gradientbased methods, en- ables engineers to find efficiently a reservoir representation that respects all static and dynamic data. Nevertheless, for multiphase flow or for compositional problems, only relatively small models can be handled with a

4D Monitoring of an Underground Gas Storage Case Using an Integrated 84% **History Matching Technique** 

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Combination of Experimental Design and Joint Modeling Methods for Quantifying the Risk Associated With Deterministic and Stochastic <u>Uncertainties - An Integrated Test Study</u>

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A Framework for History Matching Using Local Optimization in Streamline **Defined Regions** 

SPE eLibrary Page 1 S PE 90137 A Framework for History Matching Using Local Optimization in Streamline Defined Regions Maud Barthelemy, Darryl H. Fenwick, Yann Gautier, SPE, IFP, and Martin J. Blunt, SPE, Imperial College London Copyright 2004, Society of Petroleum Engineers Inc. This paper was prepared for presentation at the SPE Annual Technical Conference and Exhibition held in Houston, Texas, U.S.A., 2629 Septem- ber 2004. This paper was selected for presentation by an SPE Program Committee following review of information contained in a proposal submitted by the author(s). Contents of the paper, as presented, have not been reviewed by the Society of

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Novel Ways of Parameterizing the History Matching Problem

SPE eLibrary Page 1 SPE 94875 Novel Ways of Parameterizing the History Matching Problem F.P.T. Silva, J.R.P. Rodrigues, P.L.B. Paraizo, R.K. Romeu, A.M.M. Peres, R.M. Oliveira, and L.B. Pinto, Petrobras, and C. Maschio, Unicamp ( )= -= Nobs i obs i sim ii dmdwmO 1 2 )()( Copyright 2005, Society of Petroleum Engineers This paper was prepared for presentation at the SPE Latin American and Caribbean Petroleum Engineering Conference held in Rio de Janeiro, Brazil, 20 23 June 2005. This paper was selected for presentation by an SPE Program Committee following review of information contained in a proposal submitted by the author(s). Contents of the paper, as

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Calibrating Log-Derived Permeability Data to PTA for Geostatistical Integration into a Fluid-Flow Simulation Model

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Streamline-Based Method With Full-Physics Forward Simulation for 82% History-Matching Performance Data of a North Sea Field

SPE eLibrary Page 1 Streamline-Based Method With Full-Physics Forward Simulation for History-Matching Performance Data of a North Sea Field Bijan Agarwal, SPE, Dubai Petroleum Co., and Martin J. Blunt, SPE, Imperial College London Summary We present a method for history-matching production data using a streamline simulation that captures all the pertinent physics, in-cluding compressible three-phase flow with gravity. We use an approach based on the assumption of 1D flow along streamlines to find the sensitivity of water flow rate at production wells to changes in permeability. Although the computation of the sensi-tivities is approximate, we show,

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Full-Physics, Streamline-Based Method for History Matching Performance Data of a North Sea Field

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> History Matching and Quantitative Use of 4D Seismic Data for an Improved Reservoir Characterization

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